

### **REMARKS**

This Application has been carefully reviewed in light of the Office Action mailed February 27, 2006. Claims 1-3 and 5-33 were pending in the Application. In the Office Action, Claims 1-3 and 5-33 were rejected. Claims 1-3 and 5-33 remain pending in the Application. Applicants respectfully request reconsideration and favorable action in this case.

As an initial matter, in the Office Action, the Examiner states that "Applicant filed affidavit, under 37 C.F.R. 1.131, claiming priority dated 8/30/2001" (Office Action, page 2). Applicants respectfully submit that Applicants did not claim a priority date of 8/30/2001. Applicants' affidavit under 37 C.F.R. § 1.131 was used to antedate a reference having a purported effective date of 8/30/2001.

In the Office Action, the following actions were taken or matters were raised:

### **SECTION 102 REJECTIONS**

Claims 1-3, 5, 6, 8-10, 26-29 and 31-33 were rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent No. US 2003/0046432 issued to Coleman et al (hereinafter "*Coleman*"). Claims 12-16 and 18 were rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent No. 5,467,459 issued to Alexander et al (hereinafter "*Alexander*"). Claims 19-23 were rejected under 35 USC §102(e) as being anticipated by Patent No. 6,343,313 issued to Salesky et al. (hereinafter "*Salesky*"). Applicant respectfully traverses these rejections.

#### **Coleman Reference**

Of the rejected claims, Claims 1, 26 and 29 are independent. Applicants respectfully submit that the Examiner has failed to establish a *prima facie* case of anticipation of independent Claims 1, 26 and 19. Further, even if the Examiner is considered to have established a *prima facie* case of anticipation for independent Claims 1, 26 and 29, which Applicants submit the Examiner has not established, Applicants respectfully submit that *Coleman* does not disclose or even suggest each and every limitations of independent Claims 1, 26 and 29.

Independent Claim 1 recites, at least in part, “a frame buffer operable to store graphics image data rendered by the graphics adapter” and “a network chip coupled to the frame buffer, the network chip comprising . . . a compression unit operable to compress graphics image data of said frame buffer into compressed graphics image data” and “a network interface operable to receive at least a portion of said compressed graphics image data . . . [and] format said received compressed graphics image data into a plurality of packets” (emphasis added). In rejecting independent Claim 1, the Examiner has simply reproduced all the claim limitations of Claim 1 and then refers generally to various portions of *Coleman* (Office Action, pages 2 and 3). Applicants respectfully remind the Examiner that 35 U.S.C. § 102 clearly states that “[a] person shall be entitled to a patent unless . . . .” Accordingly, the burden for proving anticipation under 35 U.S.C. § 102 is on the Examiner, and it is the Examiner who has to prove that a claim is not patentable.

In rejecting Claim 1, the Examiner has not provided any reasoning or made any assertions as to why he believes that the portions of *Coleman* referred to anticipate Claim 1. Applicants submit that the cited portions of *Coleman* do not teach or suggest all limitations of Claim 1. For example, regarding Claim 1’s recitation of “a network chip,” the Examiner fails to explicitly identify any element in the *Coleman* reference that the Examiner considers to correspond to the “network chip” recited by Claim 1. Moreover, the portions of *Coleman* referred to by the Examiner appear to relate to only portions of the limitations recited by Claim 1 while remaining limitations expressly recited by Claim 1 appear to be ignored by the Examiner (e.g., the “network chip” recited by Claim 1), which is improper. For example, in the Office Action, the Examiner recites Claim 1’s limitation of “a network chip . . . comprising . . . a compression unit” and states: “Figure 1, item 158 contains Application Program which compresses the encoded graphical data ([0040] line 6-7” (Office Action, page 2). Neither the Examiner’s reasoning nor the portion of *Coleman* referred to by the Examiner discloses or even suggests a “network chip” comprising a “compression unit” as recited by Claim 1, and Applicants are unable to determine why the Examiner believes that the portion of *Coleman* referred to by the Examiner anticipates

Claim 1. Applicant respectfully reminds the Examiner that in order to make a *prima facie* case of anticipation, “[t]he identical invention must be shown in as complete detail as is contained in the . . . claim” and that each and every element as set forth in the claim must be found in the reference. Applicants submit that such detail is lacking in *Coleman*, and the Office Action fails to explain why the Examiner believes that such detail is present in *Coleman*. To the contrary, Applicants respectfully submit that *Coleman* does not disclose or even suggest, either in the portion referred to by the Examiner or elsewhere in *Coleman*, “a network chip . . . comprising . . . a compression unit . . . [and] a network interface” as recited by independent Claim 1. Therefore, for at least this reason, Applicants respectfully submit that the Examiner has failed to establish a *prima facie* case of anticipation of Claim 1, and Applicants submit that *Coleman* does not disclose or even suggest each and every limitation of independent Claim 1.

Further, Claim 1 is directed toward a graphics adapter and recites “a frame buffer operable to store graphics image data rendered by the graphics adapter” (emphasis added). As discussed above, the portions of *Coleman* referred to by the Examiner appear to relate to only portions of the limitations recited by Claim 1 while remaining limitations expressly recited by Claim 1 appear to be ignored by the Examiner, which is improper. For example, in the Office Action, the Examiner recites Claim 1’s limitation of “a frame buffer operable to store graphics image data rendered by the graphics adapter” and states: “Figure 1, item 150 the server node where scrolling the frame buffer ([0071] line 4) implies the existence of frame buffer within the server node” (Office Action, page 2). Neither the Examiner’s reasoning nor the portion of *Coleman* referred to by the Examiner discloses or even suggests that image data is “rendered” by the server node of *Coleman*, and Applicants are unable to determine why the Examiner believes that the portion of *Coleman* referred to by the Examiner anticipates Claim 1. To the contrary, *Coleman* recites:

Each application server 150 hosts one or more application programs 158 that can be accessed by the client nodes 110. Examples of such applications include word processing programs such as Microsoft word AND SPREADSHEET PROGRAMS SUCH AS Microsoft excel, BOTH

MANUFACTURED BY Microsoft Corporation of Redmond, Wash., financial reporting programs, customer registration programs, programs providing technical support information, customer database applications, or application set managers.

(*Coleman*, paragraph 0038). Thus, Applicants respectfully submit that *Coleman* does not appear to disclose or even suggest, either in the portion of *Coleman* referred to by the Examiner or elsewhere in *Coleman*, that the server 150 of *Coleman* “render[s]” graphics image data as recited by Claim 1. Therefore, for at least this reason also, *Coleman* does not anticipate Claim 1.

Independent Claim 26 recites “a network attachable graphics chip coupled to [a] frame buffer, said network attachable graphics chip comprising . . . a graphics unit operable to render a graphics image . . . a compression unit operable to compress graphics image data of said frame buffer . . . [and] a network interface operable to format said compressed graphics image data into a plurality of packets for transmission over a communication network” (emphasis added). At least for the reasons discussed above in connection with independent Claim 1, Applicants respectfully submit that the Examiner has not provided any reasoning or made any assertions as to why he believes that the portions of *Coleman* referred to anticipate Claim 26. Applicants submit that the cited portions of *Coleman* do not teach or suggest all limitations of Claim 26. Neither the Examiner’s reasoning nor the portion of *Coleman* referred to by the Examiner discloses or even suggests a “network attachable graphics chip” much less a “network attachable graphics chip” comprising a “graphics unit operable to render a graphics image,” a “compression unit” and a “network interface” as recited by Claim 26, and Applicants are unable to determine why the Examiner believes that the portion of *Coleman* referred to by the Examiner anticipates Claim 26. Applicants respectfully submit that the Examiner has failed to establish a prima facie case of anticipation of Claim 26, and Applicants respectfully submit that *Coleman* does not disclose or even suggest each and every limitation of independent Claim 26.

Moreover, in the Office Action, the Examiner states with respect to Claim 26 that “claims 26-27 are similar in scope to the claims 1-2, and thus the rejections to claims 1-2 hereinabove are also applicable to claims 26-27” (Office Action, page 4). Applicants respectfully disagree.

Claim 26 recites “a network attachable graphics chip” comprising “a graphics unit operable to render a graphics image.” At least this limitation of Claim 26 is not recited by Claim 1. Therefore, Claims 1 and 26 are not “similar in scope” as asserted by the Examiner. Accordingly, the Examiner has failed to address limitations expressly recited by Claim 26 and, therefore, for at least this reason also, the Examiner has failed to establish a *prima facie* case of anticipation of Claim 26.

Independent Claim 29 recites “a graphics unit adapted to render graphics image data,” “a frame buffer operable to store said graphics image data” and “a network interface operable to receive at least a portion of said graphics image data from said frame buffer . . . [and] format said received graphics image data into a plurality of packets for transmission over a communication network” (emphasis added). At least for the reasons discussed above in connection with independent Claim 1, Applicants respectfully submit that the Examiner has not provided any reasoning or made any assertions as to why he believes that the portions of *Coleman* referred to anticipate Claim 29. Applicants submit that the cited portions of *Coleman* do not teach or suggest all limitations of Claim 29. Neither the Examiner’s reasoning nor the portion of *Coleman* referred to by the Examiner discloses or even suggests a “a graphics unit adapted to render graphics image data” as recited by Claim 29, and Applicants are unable to determine why the Examiner believes that the portion of *Coleman* referred to by the Examiner anticipates Claim 29. Applicants respectfully submit that the Examiner has failed to establish a *prima facie* case of anticipation of Claim 29, and Applicants respectfully submit that *Coleman* does not disclose or even suggest each and every limitation of independent Claim 29.

Further, in the Office Action, the Examiner states with respect to Claim 29 that “claim 29 is similar in scope to the claim 1, and thus the rejections to claim 1 hereinabove is also applicable to claim 29” (Office Action, page 4). Applicants respectfully disagree. Claim 29 recites “a graphics unit adapted to render graphics image data.” At least this limitation of Claim 29 is not recited by Claim 1. Additionally, Claim 1 recites “a compression unit” which is not recited by Claim 29. Therefore, Claims 1 and 29 are not “similar in scope” as asserted by the Examiner.

Accordingly, the Examiner has failed to address limitations expressly recited by Claim 29 and, therefore, for at least this reason also, the Examiner has failed to establish a *prima facie* case of anticipation of Claim 29.

Additionally, the Examiner refers to item 164 of *Coleman* as corresponding to the “network interface” recited by Claim 29 (Office Action, page 3 (as applied by the Examiner to Claim 1)). Applicants respectfully disagree. *Coleman* recites:

Similarly, the server node 150 includes a processor 152, volatile memory 154, an operating system 156, an application program 158, a server agent 160, persistent storage memory 162, and a network interface 164.

(*Coleman*, paragraph 0037). Applicants have been unable to locate any other disclosure in *Coleman* relating to the “network interface 164” of *Coleman*. Therefore, for at least this reason, Applicants respectfully submit that *Coleman* does not disclose or even suggest “a network interface operable to receive at least a portion of said graphics image data from said frame buffer . . . [and] format said received graphics image data into a plurality of packets for transmission over a communication network” as recited by Claim 29. To the contrary, *Coleman* appears to disclose a server agent 160, which is a component of the *Coleman* system separate and apart from the network interface 164 of *Coleman* (*Coleman*, figure 1), that “compresses the encoded graphical data (step 206) . . . [and] creates a transport protocol packet incorporating the intercepted command and compressed, encoded data (step 208)” (*Coleman*, paragraph 0040) (emphasis added). Thus, Applicants respectfully submit that *Coleman* does not disclose or even suggest “a network interface operable to receive at least a portion of said graphics image data from said frame buffer . . . [and] format said received graphics image data into a plurality of packets for transmission over a communication network” as recited by Claim 29. Accordingly, for at least this reason also, *Coleman* does not anticipate Claim 29.

Claims 2, 3, 5, 6, 8-10, 27, 28 and 31-33 that depend respectively from independent Claims 1, 26 and 29 are also not anticipated by *Coleman* at least because they incorporate the

limitations of respective Claims 1, 26 and 29 and also add additional elements that further distinguish *Coleman*. Therefore, Applicants respectfully request that the rejection of Claims 1-3, 5, 6, 8-10, 26-29 and 31-33 be withdrawn.

#### Alexander Reference

Of the rejected claims, Claim 12 is independent. Applicants respectfully submit that *Alexander* does not disclose or even suggest each and every limitation of independent Claim 12. For example, independent Claim 12 recites “logically dividing a frame buffer of a graphics adapter into a plurality of segments, at least one segment of said plurality of segments storing graphics image data rendered by the graphics adapter and corresponding to a particular destination device of a plurality of destination devices” and “formatting at least a portion of said graphics image data stored in said selected at least one segment into a plurality of packets for transmission by a network interface of said graphics adapter to said destination device” (emphasis added). In the Office Action, the Examiner refers to item 168 of *Alexander* as corresponding to the “frame buffer” recited by Claim 12 (Office Action, page 5). In the Office action, the Examiner does not explicitly identify any component in *Alexander* the Examiner considers to correspond to the “destination device” recited by Claim 12, thereby leaving Applicants to guess as to the Examiner’s basis for rejecting Claim 12, which is improper. The Examiner also refers to column 22, lines 41-44, of *Alexander* as purportedly disclosing “logically dividing a frame buffer . . . into a plurality of segments [where at least one segment] correspond[s] to a particular destination device” as recited by Claim 12 (Office Action, page 5). *Alexander* recites:

The processor address lines that carry the two least significant bits, or tag, are connected to the FIFO 190, which accepts the two bits as data along with the 32-bit graphic data, forming a total of 34-bits of tagged data.

In order to select the FIFO, the uppermost address bits, all of which are identical, are input to the FIFO select logic 200 to generate an enable signal on the FIFO write enable line. . . . This action causes the 34-bits of tagged data to be received from the polygon processor [30], and the 34-bits in the FIFO [190] to be output to

the command distributor 180. The command distributor [180] peels off the tag bits and routes them to the tag decoder [202]. Similarly, the 32-bits of graphic data are output to the BBI ASICs [166]. The tag decoder [202] identifies the destination BBI ASIC from the tag and enables the proper BBI ASIC to receive the data using the BBI ASIC select lines. By utilizing the polygon processor's address lines essentially as device identification lines, it is possible to identify the destination BBI ASIC without increasing the data bandwidth between the polygon processor and the FIFO. The invention can be utilized to tag data in any system that includes memory space that is assigned to a set of destination devices and that can be partitioned so that each address space partition has a logical meaning. A reference to any of the partitions will then implicitly cause the referenced data to be tagged with the tag assigned to the particular destination device.

(*Alexander*, column 22, lines 17-48) (emphasis added). Thus, based on the foregoing, Applicants presume that the Examiner considers the BBI ASICs 166 of *Alexander* to correspond to the "destination device" recited by Claim 12 because the BBI ASICs 166 of *Alexander* are the destination devices in *Alexander* that receive data from the FIFO of *Alexander* based on the tagged FIFO data of *Alexander*. However, the FIFO of *Alexander* that appears to be partitioned based on a particular destination device is not a "frame buffer" as recited by Claim 12. To the contrary, the FIFOs 190 of *Alexander* that appear to be partitioned based on a particular destination device (e.g., a BBI ASIC 166 of *Alexander*) appear to be part of the polygon processing pipeline 30 of *Alexander* (e.g., see *Alexander*, column 19, lines 25-60, figures 10 and 11). Thus, Applicants respectfully submit that *Alexander* does not disclose or even suggest "logically dividing a frame buffer of a graphics adapter into a plurality of segments, at least one segment of said plurality of segments storing graphics image data rendered by the graphics adapter and corresponding to a particular destination device of a plurality of destination devices" as recited by Claim 12 (emphasis added). To the contrary, the frame buffers 168 of *Alexander* referred to by the Examiner in the Office Action do not appear to be logically divided or associated with any particular destination device. Therefore, for at least this reason, Applicants respectfully submit that Claim 12 is patentable over the *Alexander* reference.



Further, in the Office Action, the Examiner refers to column 4, lines 4-6, of *Alexander* as disclosing “formatting at least a portion of said graphics image data . . . into a plurality of packets . . . by a network interface of said graphics adapter to said destination device over said communication network” as recited by Claim 12 (emphasis added). Applicants respectfully disagree. The Examiner does not explicitly identify any component of *Alexander* that the Examiner considers to correspond to the “network interface” recited by Claim 12, thereby leaving Applicants to guess as to the Examiner’s reasoning for rejection Claim 12, which is improper. *Alexander* appears to disclose a host interface 28 which appears to perform and/or control communications between the system 10 of *Alexander* and a host computer (*Alexander*, column 18, lines 45-63, figure 10). However, *Alexander* does not appear to disclose or even suggest that the host interface 28 of *Alexander* “format[s] . . . graphics image data” for transmission “to [a] destination device” (e.g., the BBI ASIC 166 of *Alexander*) as recited by Claim 12. Therefore, for at least this reason also, Applicants respectfully submit that *Alexander* does not anticipate Claim 12.

Claims 13-16 and 18 that depend from independent Claim 12 are also not anticipated by *Alexander* at least because they incorporate the limitations of Claim 12 and also add additional elements that further distinguish *Alexander*. Therefore, Applicants respectfully request that the rejection of Claims 12-16 and 18 be withdrawn.

#### Salesky Reference

Of the rejected claims, Claim 19 is independent. Applicants respectfully submit that *Salesky* does not disclose or even suggest each and every limitation of independent Claim 19. For example, independent Claim 19 recites “comparing graphics image data of a new image for a particular destination device of a plurality of destination devices with graphics image data of a previous image for said particular destination device stored in a frame buffer of a graphics adapter remote from said particular destination device, said graphics adapter rendering said graphics image data for said new image and said previous image” (emphasis added). In the Office Action, the Examiner asserts that column 17, lines 7-8, of *Salesky* discloses the

“rendering” of graphics image data recited by Claim 19 (“where scanning is a rendering process” (Office Action, pages 9 and 10)). Applicants respectfully disagree.

*Salesky* is directed toward a system that drops intermediate updates to a stream of data where they are obsolete by later arriving data updates (*Salesky*, abstract, lines 1-6). *Salesky* recites:

When a presenter makes a change to the part of screen that is in the capture rectangle, a signal can be given to the presenter client via the server when all attendee clients have received the update that results from the change. The presenter is then assured that all other conferees have seen the change he or she has made. An example of how this can be accomplished is given by the following. The conference server is aware of the geometry of the capture rectangle and the blocks are constantly scanned from left to right, starting at the top and moving toward the bottom.

(*Salesky*, column 16, line 66 to column 17, line 8). *Salesky* also appears to disclose that during a conferencing session, the presenter client takes periodic snap-shots of the screen image contained within a rectangular boundary determined by the presenter (*Salesky*, column 7, lines 35-38). Thus, the “scanning” function referred to by the Examiner in *Salesky* appears to relate to the scanning of different blocks of the image falling within the designated rectangular boundary. Accordingly, the “scanning” function of *Salesky* referred to by the Examiner is not a “rendering [of] graphics image data” as recited by Claim 19. Therefore, for at least this reason, Applicants respectfully submit that *Salesky* does not anticipate Claim 19.

Further, Claim 19 recites “comparing graphics image data of a new image for a particular destination device of a plurality of destination devices with graphics image data of a previous image for said particular destination device” (emphasis added). Applicants respectfully submit that *Salesky* does not disclose or even suggest comparing graphics image data “for a particular destination device” of a plurality of destination devices as recited by Claim 19. In the Office action, the Examiner refers to the attendee client computer 18 as corresponding to a “destination device” recited by Claim 19 (Office Action, page 9). However, *Salesky* recites:

The presenter client . . . captures information . . . from a program or programs running on the presenter's machine and relays it to the server, as explained in more detail below. The server relays this information to all of the attendee client computers participating in the same session or conference . . . .

(*Salesky*, column 7, lines 21-29) (emphasis added). Thus, Applicants respectfully submit that *Salesky* does not disclose or even suggest that graphics image data is compared for a "particular destination device" of a plurality of destination devices as recited by Claim 19. To the contrary, *Salesky* appears to make no distinction between any of the attendee client computers 18. Therefore, for at least this reason also, Applicants respectfully submit that *Salesky* does not anticipate Claim 19.

Claims 20-23 that depend from independent Claim 19 are also not anticipated by *Salesky* at least because they incorporate the limitations of Claim 19 and also add additional elements that further distinguish *Salesky*. Therefore, Applicants respectfully request that the rejection of Claims 19-23 be withdrawn.

### **SECTION 103 REJECTIONS**


Claims 7, 11, 17 and 30 were rejected under 35 USC §103(a) as being unpatentable over *Coleman*. Claims 24 and 25 were rejected under 35 U.S.C. 103(a) as being unpatentable over *Salesky*. Claims 7, 11, 17, 24, 25 and 30 depend respectively from independent Claims 1, 12, 19 and 29. As discussed above, independent Claims 1, 12, 19 and 29 are patentable over the respective *Coleman* and *Salesky* references. Therefore, Claims 7, 11, 17, 24, 25 and 30 that depend respectively therefrom are also patentable. Accordingly, Applicants respectfully request that the rejection of Claims 7, 11, 17, 24, 25 and 30 be withdrawn.

**CONCLUSION**

Applicants have made an earnest attempt to place this case in condition for immediate allowance. For the foregoing reasons and for other reasons clearly apparent, Applicant respectfully requests reconsideration and full allowance of all pending claims.

No fee is believed due with this Response. If, however, Applicant has overlooked the need for any fee due with this Response, the Commissioner is hereby authorized to charge any fees or credit any overpayment associated with this Response to Deposit Account No. 08-2025 of Hewlett-Packard Company.

Respectfully submitted,

By:   
James L. Baudino  
Reg. No. 43,486

Date: May 30, 2006

Correspondence to:  
L.Joy Griebenow  
Hewlett-Packard Company  
Intellectual Property Administration  
P. O. Box 272400  
Fort Collins, CO 80527-2400  
Tel. 970-898-3884